

Atty. Docket No. 412589

REMARKS/ARGUMENTS

Claims 1-3, 5, 9, 8, 21, 22 and 25-32 remain pending in this application (hereinafter, the "373 Application"). Claims 1, 25 and 26 are amended for clarity. All of the aforementioned claims stand rejected under 35 U.S.C. §112, first paragraph and 35 U.S.C. §102.

It is believed that the following remarks and the above amendments attend to all issues presented in the final Office Action dated 04 December 2006. Headings presented below reflect the order of issues presented in the aforementioned Office Action.

Claim Rejections – 35 U.S.C. §112

Claims 1-8, 21, 22 and 25-32 stand rejected under 35 U.S.C. §112, first paragraph, as based on a disclosure which is not enabling. The Examiner states that "fluid receptacles with symbols that become visible after being filled with fluid and thus convey information to the user and observers of the receptacle. critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure [sic]." Office Action p. 2, item 5. The Examiner further notes that "Applicant has amended the claims to recite 'a transparent symbol' without any limitations that the symbol will be come visible." Office Action p. 2, item 5. Given this note, we believe that the amendments to independent claims 1 and 25 serve to overcome the §112 rejection. The claims now indicate that the recited difference in water reactivities renders the symbol visually distinct from the container when the container holds a fluid.

The amendments to the claims are fully supported by the '373 Application as filed. For example:

"FIG. 4a depicts fluid receptacle assembly 200 after additional of a cold fluid 206 to internal receptacle space 205 of receptacle body 201. The fluid 206 is sufficiently cold to reduce the temperature of receptacle assembly 200 to the condensation point...This causes the formation of condensation beads 207 on the outer surfaces of receptacle body 201...Symbol body 101, on the other hand, is hydrophilic. For this reason, water beads do not form on symbol body 101. Instead, symbol 101 body is

Atty. Docket No. 412589

coated with a relatively uniform film of water. *This causes symbol body 101 to differ in appearance from the surrounding surfaces of receptacle body 201, and renders symbol body 101 visually distinct from receptacle body 201.*" Specification p. 5 ¶¶[0029]-[0030], emphasis added.

"Symbols 415 are made visible by passing a coolant through U-tube 408...This cools the exterior wall to the condensation point in the environment where industrial tank 101 is situated, and in turn causes the formation of water beads on the outer surface of industrial tank 101 that surrounds symbols 415 as a consequence of the hydrophobic nature of that surface. Symbols 415 become visible because water beads do not form on them as a consequence of their hydrophilic nature." Specification p. 7 ¶[0042].

"When beverage mug assembly 300 is filled with a beverage that is sufficiently cold to cause the exterior of beverage mug assembly 300 to reach the condensation point in the environment where beverage mug assembly 300 is situated, beads of condensation form on mug extensions 316 through 325 because they are hydrophilic. Beads of condensation do not form on mug extensions 307 through 315 because they are hydrophobic...a counterpart of the symbol "X" formed by mug extensions 307 through 315 is created on the substrate in the form of a dry symbol "X" surrounded by droplets or a film of water." Specification p. 8 ¶[0045].

"...the material of which a symbol is fabricated should have a water reactivity that differs from the water reactivity of the fluid receptacle to which the symbol will be affixed. Thus, if a fluid receptacle is fabricated from a hydrophilic material, the symbol should be fabricated from a hydrophobic material. Conversely, if the fluid receptacle is fabricated of a hydrophilic material, the symbol should be fabricated from a hydrophilic material, as discussed in connection with FIGS. 1 through 4A above. A

Atty. Docket No. 412589

symbol also may be made of a thermosensitive material that changes color with a change in temperature." Specification p. 6 ¶[0033].

We accordingly respectfully request withdrawal of the Examiner's rejection under 35 U.S.C. §112.

Claim Rejections – 35 U.S.C. §102

Claims 1-8, 21, 22 and 26-32 stand rejected under 35 U.S.C. §102(b) as being anticipated by Hornsby (U.S. Patent No. 4,032,687). We respectfully disagree and traverse the rejection.

In order to anticipate the aforementioned claims, Hornsby must teach every element of the claim and "the identical invention must be shown in as complete detail as contained in the ... claim." MPEP §2131 citing *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 2 USPQ2d 1051 (Fed. Cir. 1987) and *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ2d 1913 (Fed. Cir. 1989). As explained in the following claim-by-claim discussion, Hornsby does not fulfill this requirement. Therefore, no anticipation can be found.

Independent Claim 1: Amended claim 1 is directed to a symbol-bearing receptacle for a fluid, including:

- (a) a container for said fluid; and
- (b) a transparent symbol disposed on said container, said symbol having a water reactivity that differs from water reactivity of said container;
- (c) wherein the difference in water reactivities renders said symbol visually distinct from said container when said container holds said fluid.

Regarding element (b), the Examiner states that "[Hornsby's] symbol is deemed to have a water reactivity that differs from the water reactivity of the container." Office Action p. 3, second paragraph.

Respectfully, we must disagree. Hornsby does not mention water reactivity, anywhere. Per MPEP §2131, "A claim is anticipated only if each and every element as set forth in the claim is found, *either expressly or inherently described*, in a single prior art reference." MPEP §2131, quoting *Verdegaal Bros. v. Union Oil Co. of California*,

Atty. Docket No. 412589

814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987), emphasis added. Since Hornsby does not expressly describe (or even suggest) differing water reactivity, we believe the Examiner is essentially making an argument that a symbol and a container having differing water reactivity are inherently described in Hornsby. However, regarding inherency, MPEP § 2112 states:

“In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. *Ex parte Levy*, 17 USPQ2D 1461, 1464 (Bd. Pat. App. & Inter. 1990).”

The Examiner provides no basis in fact to support inherently present and differing water reactivities of Hornsby's appliqué and cup. In keeping with the above requirements, the Examiner does attempt to provide technical reasoning, particularly stating that “The symbol and the container can either be hydrophilic or hydrophobic, since the reference discloses that the symbol and the container can either be paper or plastic”. Office Action p. 3, lines 1-2. However, this reasoning is insufficient because the Examiner does not show that differing water reactivities are necessarily present. Furthermore, the above statement is not entirely correct. Hornsby does not teach a symbol that is paper or plastic, but rather recites an appliqué that is made up of both paper and plastic components. There is no mention of water reactivity (e.g., hydrophilic or hydrophobic) of the complete appliqué.

For example, Hornsby's appliqué is described as having a base layer 14 that “can be formed of paper or plastic” col. 3, line 8. However, base layer 14 is backed with an attaching medium 20, which “would ordinarily comprise a highly tackified synthetic polymer with permanent sticky properties...Typical pressure sensitive adhesive materials are those including a rubbery polymeric compound, with suitable compatible resinous tackifiers and dispersed in an appropriate solvent.” Hornsby col. 2, lines 55-64. The base layer 14 is covered on its opposite side by indicia means 34, a liquid crystal material 26 and a transparent protective layer 28, “in such a manner as to fully envelop and protect the liquid crystalline layer 26,” Col. 3, lines 51-53; see also FIG. 3. Again, Hornsby is

Atty. Docket No. 412589

silent as to hydrophobic, hydrophilic or otherwise water reactive properties of this complete appliqué.

Specific water reactivities of Hornsby's appliqué and cup are not taught, depicted or even mentioned. Furthermore, the Examiner has not shown that differing water reactivities are necessarily present in Hornsby. Once more, "To establish inherency, the extrinsic evidence must make clear that the missing descriptive matter is *necessarily* present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. *The mere fact that a certain thing may result from a given set of circumstances is not sufficient.*" MPEP §2112(IV), quoting *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999). The rejection under 35 U.S.C. §102 therefore fails.

In addition, Hornsby does not teach or suggest a transparent symbol, instead reciting an visible appliqué with several visible and colorful layers. Hornsby's appliqué includes indicia means 34, which "can take the form of a printed advertising message, an insignia or other forms of printed or artistic matter" col. 4, lines 1-3; see also FIGs. 4-5. Hornsby nowhere indicates that the indicia means, a part of the appliqué, is transparent. Indeed, transparent indicia means would counter Hornsby's aforementioned advertising objectives. The indicia means is meant to be seen, and is therefore not transparent. In addition, a layer of liquid crystalline material overlies the indicia means. As is known in the art, liquid crystalline material is not transparent when within its event temperature range, instead appearing colorfully opaque and metallic. Hornsby thus fails to teach, or even suggest, a transparent symbol, as in Applicant's claim 1.

We presented these arguments in our response of 7/18/2006. The Examiner states that these arguments "have been considered but are moot due to the new grounds of rejection." Office Action p. 3, final paragraph. However, the Examiner then presents exactly the same reasons for rejection over Hornsby, once again. Per MPEP §707.07(f), "Where the applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant's argument and answer the substance of it." We therefore request that the Examiner fully consider the above arguments. We believe that

Atty. Docket No. 412589

these arguments fully address and overcome the Examiner's rejection; however, if the Examiner nonetheless repeats the rejection, we further request that she answer the substance of each of the above arguments.

However, even if the Examiner maintains her position as to water reactivities, we note that Hornsby does not teach or suggest claim 1 element (c). That is, Hornsby does not teach or suggest that differences in water reactivities render a symbol visually distinct from a container when the container holds a fluid. Rather, Hornsby teaches an appliqué that changes color in response to temperature changes. In particular, "The nature of the liquid crystalline material 26 is such that it undergoes spectral color changes of an iridescent nature in response to temperature changes...the color change is reversible so that if the colors change from red through the spectrum to blue upon heating of the liquid crystal material, the reverse colors will appear as cooling occurs." Hornsby col. 3, lines 14-27.

An appliqué that changes color responsive to temperature is clearly different from Applicant's transparent symbol that is rendered visible due to differing water reactivities. And Hornsby does not recite, depict, teach or even suggest the latter. Absent any recitation, teaching or suggestion by Hornsby, claim 1 is not anticipated. We accordingly request withdrawal of the Examiner's rejection, and allowance of claim 1.

Dependent Claims 2, 3, 5-8, 21 and 22: These claims depend from claim 1, and benefit from like argument. However, there are additional reasons for patentability of these dependent claims, including those recited below. The arguments below were presented in Applicant's response of 7/18/2006. However, the Examiner has maintained her rejection without responding to the substance of these arguments. Therefore, we respectfully request the Examiner's careful consideration of the arguments below. We believe that the arguments below overcome each of the Examiner's rejections; however, if the Examiner should nonetheless decide to maintain her rejection we request a response to the substance of each argument (per MPEP §707.07(f)).

Claims 2 and 3: Claims 2 and 3 depend from claim 1, and benefit from like argument. Furthermore, claims 2 and 3 respectively require a hydrophobic symbol with a hydrophilic container, and a hydrophilic symbol with a hydrophobic container. As the

Atty. Docket No. 412589

Examiner notes, Hornsby recites a paper or plastic cup. However, Hornsby gives no indication of any overall hydrophilic or hydrophobic property of his appliqué. Therefore, Hornsby fails to teach the limitations of claims 2 and 3, and there is insufficient evidence to prove that these limitations are "*necessarily* present in the thing described in the reference," MPEP §2112(IV), quoting *In re Robertson*, presented in full, above. Withdrawal of the Examiner's rejection is therefore respectfully requested, along with allowance of claims 2 and 3.

Claim 5: Claim 5 depends from claim 1, and benefits from like argument. Withdrawal of the Examiner's rejection is therefore respectfully requested, as is , and allowance of claim 5.

Claim 6: We must also respectfully disagree with the rejection of claim 6. Claim 6 recites a symbol comprising a silicone film. Claim 6 depends from claim 1, which describes the symbol as being "disposed on said container". Hornsby does not teach a symbol disposed on a container and comprising a silicone film. The only mention of silicone in Hornsby comes in describing the release layer provided on a backing paper that is stuck to the bottom of Hornsby's appliqué, for protection prior to application. The release paper and the silicone are peeled off of Hornsby's appliqué, so that the appliqué can be stuck to a desired surface. Therefore, Hornsby's appliqué does not include the silicone when disposed on a cup. Withdrawal of the Examiner's rejection is respectfully requested, along with and allowance of claim 6.

Claim 7: Claim 7 depends from claim 1, and benefits from like argument. We respectfully request withdrawal of the Examiner's rejection, and allowance of claim 7.

Claim 8: Claim 8 is not also not anticipated. Hornsby does not teach a symbol embedded in the surface of a container. Rather, Hornsby's symbol is affixed to a surface and peeled off for re-use. See col. 4, lines 41-52. Withdrawal of the Examiner's rejection is respectfully requested, along with allowance of claim 8.

Claim 21: Claim 21 depends from claim 1, and recites that the container comprises a confined passageway disposed within a surface thereof. There is simply no teaching, depiction or hint of such a confined passageway in Hornsby. Therefore,

Atty. Docket No. 412589

anticipation is not established. We respectfully request withdrawal of the Examiner's rejection, and allowance of claim 21.

Claim 22: Claim 22 depends from claim 21, and further recites that the confined passageway is configured for holding a coolant. Hornsby is not only silent as to any such confined passageway, Hornsby also fails to mention a coolant, anywhere. Withdrawal of the Examiner's rejection is respectfully requested, as is allowance of claim 22.

Claim 25: Claim 25 is directed to a symbol-bearing receptacle for a fluid, including:

- (a) a container for the fluid, the container comprising an open fluid receptacle formed of a base disposed upon a substrate and a wall affixed to and extending upwardly from the base; and
- (b) a transparent symbol disposed on the base and facing said substrate, the symbol having a water reactivity that differs from a water reactivity of the container;
- (c) wherein the difference in water reactivities renders said symbol visually distinct from said container when said container holds said fluid.

As argued with respect to claim 1, Hornsby is silent as to water reactivities, and the Examiner's line of technical reason does not show that differing water reactivities are necessarily present in Hornsby. Furthermore, Hornsby does not teach a transparent symbol, instead specifying an appliqué with indicia means that are "imprinted upon the upper surface 16 of the base sheet 14, or alternatively can be imprinted upon the overlying transparent *layer* 28." Hornsby col. 3, lines 65-68, emphasis added; see also FIGs. 3-5. Hornsby fails to teach at least two limitations of claim 25, thus, rejection under 35 U.S.C. § 102(b) fails. We again request the Examiner's consideration of these arguments. We believe that these arguments overcome the anticipation rejections; however, if the Examiner nonetheless persists with her rejections, we further request a full response to the substance of each argument (MPEP §707.07(f)).

Atty. Docket No. 412589

However, even if the Examiner persists with her re-stated rejections, we note that Hornsby is absolutely silent as to a symbol that is rendered visually distinct from a container due to differing water reactivities (see element (c)). Again, Hornsby teaches an appliqué that changes color responsive to temperature. This is different from Applicant's claim 25. See arguments in support of claim 1, above.

Given the above remarks and the amendment to claim 25, we respectfully request withdrawal of the Examiner's rejection, and allowance of claim 25.

Claims 26-32: These claims depend from claim 1 and benefit from like argument. However, there are additional reasons for patentability of these claims, including the following. The arguments below were presented in Applicant's response of 7/18/2006. Per MPEP §707.07(f), "Where the applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant's argument and answer the substance of it." However, the Examiner has repeated the identical rejections without responding to Applicant's arguments. We therefore request careful consideration of the following points. We believe that the arguments below serve to overcome the §102 rejections. However, if the Examiner persists with her rejections once more, we further respect a full response to the substance of each argument.

Claim 26: Claim 26 depends from claim 25, and benefits from like argument. Claim 26 also recites the unique limitation of a symbol comprising a pattern that develops on a surface supporting the base, due to water condensation. Hornsby simply teaches nothing of the sort. Claim 26 is not anticipated. Accordingly, we request withdrawal of the Examiner's rejection, and allowance of claim 26.

Claim 27: Claim 27 also depends from claim 25, and further recites a base comprising a material surrounding the symbol that is dissimilar to material forming the symbol. Respectfully, Hornsby does not specify a base material at all, let alone a base material that is dissimilar to material of a symbol disposed thereon. Withdrawal of the Examiner's rejection is respectfully requested, as is allowance of claim 27.

Claims 28 and 29: Claims 28 and 29 depend from claim 27, and further recite hydrophobic base material surrounding a symbol formed of hydrophilic material (claim

Atty. Docket No. 4/2589

28) and vice-versa (claim 29). As noted above with respect to claims 2 & 3, Hornsby gives no indication of any overall hydrophilic or hydrophobic property of his appliqué. Therefore, there is insufficient evidence to prove that the hydrophobic/hydrophilic relationships of claims 28 and 29 are "*necessarily* present in the thing described in the reference," MPEP §2112(IV), quoting *In re Robertson*, presented in full, above. Withdrawal of the Examiner's rejection is therefore respectfully requested, along with allowance of claims 28 and 29.

Claim 30: We must also respectfully disagree with the Examiner's rejection of claim 30. Hornsby absolutely does not teach or suggest a plurality of base extensions elevating a substrate from said base, wherein one or more of the base extensions form a symbol. Withdrawal of the Examiner's rejection is requested, as is allowance of claim 30.

Claims 31 and 32: These claims recite limitations also found in claims 21 and 22, argued above. As noted with respect to these claims, Hornsby does not teach a container with a confined passageway disposed within a surface thereof, let alone such a passageway configured for holding a coolant. See arguments in support of claims 21 and 22. We respectfully request withdrawal of the Examiner's rejection, , and allowance of claims 31 and 32.

Atty. Docket No. 412589

CONCLUSION

We submit that the above amendments and remarks address each and every rejection presented in the final Office Action of 04 December 2006. We accordingly solicit a notice of allowance for all of claims 1-3, 5, 6, 8, 21, 22 and 25-32.

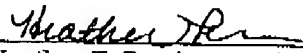
This Amendment and Response is timely filed within two months of the 04 December Office Action, as the two-month mark fell upon a Sunday (Feb. 4, 2007). Per 37 C.F.R. §1.7, *"When the day, or the last day fixed by statute or by or under this part for taking any action or paying any fee in the United States Patent and Trademark Office falls on Saturday, Sunday, or on a Federal holiday within the District of Columbia, the action may be taken, or the fee paid, on the next succeeding business day which is not a Saturday, Sunday, or a Federal holiday."* This response is thus timely submitted within the two-month period for receiving an Advisory Action. We therefore request an Advisory Action if any issues remain outstanding. However, the Examiner is also encouraged to telephone Applicant's attorney, Curtis A. Vock, at (720) 931-3033, to discuss any such outstanding issues, prior to issuing any further Action.

No fees are believed due. However, should any fee be deemed necessary in connection with this Amendment and Response, please charge Deposit Account No. 12-0600. Should any issues remain outstanding, the Examiner is encouraged to telephone the undersigned attorney.

Respectfully submitted,

LATHROP & GAGE L.C.

By


Heather F. Perrin, Reg. No. 52,884
4845 Pearl East Circle, Suite 300
Boulder, Colorado 80301
Tele: (720) 931-3033
Fax: (720) 931-3001